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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|------------------------|---------------------|------------------|
| 10/697,199 | 10/31/2003 | Srinivasan M. Komandur | ASMNUT.008CP1* | 9910 |
| 20995 | 7590 | 03/02/2006 | EXAMINER | |
| KNOBBE MARTENS OLSON & BEAR LLP | | | MOORE, KARLA A | |
| 2040 MAIN STREET | | | ART UNIT | |
| FOURTEENTH FLOOR | | | PAPER NUMBER | |
| IRVINE, CA 92614 | | | 1763 | |

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,199

Applicant(s)

KOMANDUR ET AL.

Examiner

Karla Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12,14,16,17 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12,14,16,17 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 30 December 2005 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of the full statutory term of U.S. Patent No. 6,736,929 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12-21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. No. 6,069,096 to Nishihata et al.

4. Nishihata et al. disclose a method of processing a workpiece using a semiconductor workpiece tool including a plurality of process modules (Figures 1-3 and 9-13; 2-1, 2-2, 2-3 and 2-4); having a robot loading window (between transferring unit containing robot and each process module) and a control system on a network (schematically illustrated in Figure 4) including a user interface (11, 13 and 14; column 5, rows 8-11), a system controller (Figure 4, 12; column 40-43) and a process module controller (Figure 4, 15; column 12, rows 32-39) associated with the process modules, comprising the steps of: storing a production route defining movement of the workpiece among a number of the process modules, the production route including a number of on-line process modules defined in the production route and at least one off line chamber not included in the production route (A plurality of production routes/modes are described in the specification and in Figure 14, e.g. "parallel operation of one cassette/one recipe" or "parallel operation of two cassettes/two recipes". An on-line process module is one that is operable for processing of a workpiece. An off-line processing is one not operable for processing of a workpiece.

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During a method of using a production route to process a workpiece in the system each of the process modules will be defined as on-line or off-line. See Figures 5 and column 13, rows 4-14); storing a number of recipes for processing the workpiece, the recipes each having a unique name and a number of processing parameters associated therewith (column 13, row 62 through column 14, row 8; also see column 6, rows 12-18, a plurality of recipe names are given, e.g. "A" or "B"); selecting the next process module in the production route when a workpiece is substantially completed with an existing process in the production route (column 3, rows 26-40) and moving the workpieces among the process modules in accordance with the selecting step (column 3, rows 26-40).

5. With respect to claims 14, further, in the method the selecting step routes the workpiece in the production route based at least in part in process module fault conditions (column 3, rows 26-40).

6. With respect to claims 16-17, the method further comprises the step of a selected process module retrieves a recipe over the network of control structures based on a recipe identifier (column 12, rows 14-25 and column 15, rows 38-49).

7. With respect to claims 19 and 20, further, in the method the selecting step routes the workpiece to an available process module based on the production route (column 3, rows 26-40).

8. With respect to claim 21, the method further comprises the step of storing process module status information; and wherein the selecting step includes the step of using the process module status information to determine the next process module in the production route (Figure 5; column 3, rows 26-40 and column 13, rows 4-14).

9. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishihata et al. as applied to claims 12-21 above in view of U.S. Patent No. 5,620,578 to Hurwitt.

10. Nishihata et al. disclose the invention substantially as claimed and as described above. It is further taught that an off-line process module not included in the production route can be configured to perform testing, maintenance or other operations while the production route is in operation (column 19, rows 12-30).

11. However, while Nishihata et al. do teach the maintenance takes place on the side apart from the other processing units, the reference does not explicitly teach a manual loading window.

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12. Hurwitt teaches providing a processing chamber of a cluster tool with a manual loading window for the purpose of communicating a service module with a process module (abstract and column 7, rows 36-49).

13. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a number of the processing modules with manual loading windows in Nishihata et al. in order to communicate a service module with each of the modules as taught by Hurwitt.

14. With respect to claim 23, the storing steps include entering information through a graphical user interface (column 12, rows 19-23).

15. With respect to claim 24, the method further comprises the step of the process module controller retrieving a recipe over the network based on a recipe name (column 12, rows 32-39).

16. With respect to claim the method further comprises the step of performing maintenance on an off-line process module while the production route is in operation (column 19, rows 12-30).

Response to Arguments

17. Applicant's arguments, filed 21 December 2005, with respect to the rejection(s) of claim(s) 1-22 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Nishihata et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free).



Kara Moore
Patent Examiner
Art Unit 1763
27 February 2006